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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/892,664	06/28/2001	Steven G. Smith	BS00-353	2057

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EXAMINER

ARMSTRONG, ANGELA A

ART UNIT	PAPER NUMBER
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2626

DATE MAILED: 08/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/892,664

Applicant(s)

SMITH ET AL.

Examiner

Angela A. Armstrong

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4,7-12,14 and 16-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4,7-12,14 and 16-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on June 29, 2006 has been entered.

Claim Rejections - 35 USC § 103

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
3. Claims 1-4, 7-12, 14, and 16-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pearson (US 6,023,684) in view of applicant's admitted prior art and Giangarra et al (U.S. Patent 6,101,472).
4. Regarding claims 1 and 7 Pearson reads on the features of a system for permitting a user to remotely access data as follows: Pearson reads on the feature of a systems interface to a plurality of legacy systems (column 1 lines 7-8), the systems interface comprising a first server for managing for protocol (done by the Web Server 50 in figure 2) and a 2nd server for generating legacy transactions (done by the Application Server 56 in figure 2) and a firewall that protects the first server and the second server (firewall 54 and filtering router 44);

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Pearson reads on the feature of a computer operable by the user to access data from the legacy systems through the systems interface (depicted in figure 2 as the process path 28-34-44-50-56-58-60), where the computer is programmed with a client application for accessing the systems interface (as happens when a client program initiates a logical session to access the system, column 4 lines 22- 24), and where the client application is adapted to format requests for information based on user input (column 4 lines 28-30);

With regard to the singular feature that is particular to claim 7, Pearson reads on the feature of a communications link coupling the computer and the means for providing an interface (column 7 lines 37-39).

Pearson does not teach the legacy system comprises at least one of a loop facility assignment control system, a loop maintenance operations system, a mechanized loop testing system, a secure network element contract server, a mechanized time reporting system, and a work activity statistical sampling plan. However, providing a legacy system which comprises one of a loop facility assignment control system, a loop maintenance operations system, a mechanized loop testing system, a secure network element contract server, a mechanized time reporting system, and a work activity statistical sampling plan, was well known in the art, as indicated by applicant's admitted prior art (see specification, pages 1 to 2). It would have been obvious to one of ordinary skill at the time of the invention to modify the system of Pearson for implementation in which the legacy system comprises a loop facility assignment control system, a loop maintenance operations system, a mechanized loop testing system, a secure network element contract server, a mechanized time reporting system, a work activity statistical sampling plan or other systems that allows user access to the legacy database, so as to provide a

system that supports real time execution of user transaction commands that require data from more than one legacy database and which provides users with real time access and execution of transaction commands over an open network without modifying a legacy database management system to support an increased number of users, as suggested by Pearson (see col. 3, lines 59-67).

Regarding the further limits of the claims, the VRU of Pearson lists the considerations required for voice processing in promotion of his invention (column 2 lines 28 - column 3 line 32) without expressly teaching away from the feature so that his invention in turn could use speech recognition. Consequently Pearson teaches the feature of a voice input device coupled to the computer (the VRU of column 2 lines 29- 33), which satisfies the requirement of claim 16, but does not provide for the further feature of claims 1 and 7, of receiving voice. Pearson does not teach the specifics of multiple operations, a graphical user interface that has a page for selecting one of the multiple operations or the specifics of the speech recognition application with voice module that accesses a stored separate vocabulary for each of the pages for selecting and performing the multiple operations utilized for generating the legacy transactions on the legacy system.

Giangarra discloses a voice command interface in a data processing system and method are implemented to allow a user to speak a name of a link identified by Hypertext Markup Language (HTML) format to receive a desired web page from a communication network, such as the Internet. During operation of the data processing system and method for implementing the voice command interface, a client computer accesses a current web page using a server. When a new web page is accessed, a central processing unit in the data processing system provides

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control signals to a speech recognition unit to clear a vocabulary list currently stored within the speech recognition unit. Subsequently, the central processing unit commences to parse the HTML source code corresponding to the accessed web page. The central processing unit then determines whether the accessed web page has any links therein. If the web page does have links, the central processing unit detects those links during a parsing operation and enables the speech recognition unit to store the text displayed to an external user, which corresponds to the link in a special vocabulary list of the speech recognition unit. If new links are displayed, the recognition unit stores the text associated with the link in a vocabulary file, which reads on a stored separate vocabulary. A user is then able to provide a voice command to access the link by speaking the text stored within the special vocabulary list. Upon speaking that text, the central processing unit accesses a web page corresponding to the link identified by the text (Figures 6-12; col. 5, lines 25-46; col. 6, lines 32-61; col. 7, line 66 to col.8, line 8). It would have been obvious to a person of ordinary skill in the art of speech signal processing at the time of the invention to apply the method and/or teachings of Giangarra et al to the device/method of Pearson so as to realize the advantage of speech input using a microphone or a telephone.

5. Regarding claim 2, the claim is set forth with the same limits as claim 1. Pearson (column 8 lines 1 8-34) reads on the feature that the computer logs into the first server over a wireless communications network (the "other physical connecting configuration" of line 23 column 8) of which special notice is provided that wireless communication was well-known in the form of cellular and cordless telephones and so would have been obvious to a person of ordinary skill in the art of speech signal processing at the time of the invention to apply as a

methods of initiating communication between the user computer/client and the host server/mainframe.

6. Regarding claim 3, the claim is set forth with the same limits as claim 1. Pearson reads on the feature that the computer logs into the first server (with the procedures in column 8 lines 25-34) over a wire line communications network (from phone to mainframe, column 1 lines 30-33).

7. Regarding claims 4 and 8 the claims are set forth with the same limits as claims 1 and 7, respectively. Pearson reads on the feature of claim 4 that the data recognized by the client application includes selection of an operation (the service call of column 11 line 10) and information completing a data field for the operation (using data in column 11 lines 10-11).

This same reference reads on the same features of claim 8 expressed in the alternative regarding the selection of an operation or the input of information into a data field for the operation.

8. Regarding claim 9, the claim is set forth with the same limits as claim 7. Pearson reads on the feature that user requests are processed by the means for providing an interface in order to generate legacy transactions (done by the Application Server 56 in figure 2).

9. Regarding claim 10, the claim is set forth with the same limits as claim 7. Pearson reads on the feature of a protocol server (the Web Server 50 in figure 2) and a transaction server (the Application Server 56 in figure 2).

10. Regarding claim 11, the claim is set forth with the same limits as claim 7. Pearson reads on the features that the protocol server receives the user requests (from 28 in figure 2) and forwards the user requests to the transaction server (50-56 in figure 2), and wherein the transaction server generates legacy transactions based on the user requests (56-58 in figure 2),

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receives the requested information based on the legacy transactions (56-58 in figure 2), and forwards the requested information to the protocol server (50-56 in figure 2).

11. Regarding claim 12 as understood by the Examiner, Pearson reads on the features for a system for remotely accessing legacy data through a systems interface to a plurality of legacy systems (28-34-44-50-56-58/60 in figure 2) as follows:

Pearson reads on the feature of a voice input device (VRU of column 2 lines 29-33);

Pearson reads on the feature of a modem (column 1 lines 59-67);

Pearson reads on the feature of a systems interface in communications with the plurality of legacy systems, wherein the systems interface is protected from the legacy systems by a firewall (firewall 54 and filtering router 44);

Pearson does not teach the legacy system comprises at least one of a loop facility assignment control system, a loop maintenance operations system, a mechanized loop testing system, a secure network element contract server, a mechanized time reporting system, and a work activity statistical sampling plan. However, providing a legacy system which comprises one of a loop facility assignment control system, a loop maintenance operations system, a mechanized loop testing system, a secure network element contract server, a mechanized time reporting system, and a work activity statistical sampling plan, was well known in the art, as indicated by applicant's admitted prior art (see specification, pages 1 to 2). It would have been obvious to one of ordinary skill at the time of the invention to modify the system of Pearson for implementation in which the legacy system comprises a loop facility assignment control system, a loop maintenance operations system, a mechanized loop testing system, a secure network

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element contract server, a mechanized time reporting system, a work activity statistical sampling plan or other systems that allows user access to the legacy database, so as to provide a system that supports real time execution of user transaction commands that require data from more than one legacy database and which provides users with real time access and execution of transaction commands over an open network without modifying a legacy database management system to support an increased number of users, as suggested by Pearson (see col. 3, lines 59-67).

Pearson reads on the feature of a computer (28 in figure 2) that includes at least one memory programmed with software for performing the following: the VRU of Pearson presents considerations required for voice processing in promotion of his invention (column 2 lines 28 - column 3 line 32) without expressly teaching away from the feature so that his invention in turn could use speech recognition. Consequently, Pearson teaches the feature of software for receiving request to input by voice. Pearson does not teach the specifics of multiple operations, a graphical user interface that has a page for selecting one of the multiple operations or the specifics of the speech recognition application with voice module for each page corresponding to the multiple operations provided by the server.

Giangarra discloses a voice command interface in a data processing system and method are implemented to allow a user to speak a name of a link identified by Hypertext Markup Language (HTML) format to receive a desired web page from a communication network, such as the Internet. During operation of the data processing system and method for implementing the voice command interface, a client computer accesses a current web page using a server. When a new web page is accessed, a central processing unit in the data processing system provides control signals to a speech recognition unit to clear a vocabulary list currently stored within the

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speech recognition unit. Subsequently, the central processing unit commences to parse the HTML source code corresponding to the accessed web page. The central processing unit then determines whether the accessed web page has any links therein. If the web page does have links, the central processing unit detects those links during a parsing operation and enables the speech recognition unit to store the text displayed to an external user, which corresponds to the link in a special vocabulary list of the speech recognition unit. If new links are displayed, the recognition unit stores the text associated with the link in a vocabulary file, which reads on a stored separate vocabulary. A user is then able to provide a voice command to access the link by speaking the text stored within the special vocabulary list. Upon speaking that text, the central processing unit accesses a web page corresponding to the link identified by the text (Figures 6-12; col. 5, lines 25-46; col. 6, lines 32-61; col. 7, line 66 to col.8, line 8). It would have been obvious to a person of ordinary skill in the art of speech signal processing at the time of the invention to apply the method and/or teachings of Giangarra et al to the device/method of Pearson so as to realize the advantage of speech input using a microphone or a telephone.

12. Regarding claim 14, the claim is set forth with the same limits as claim 12. The features of the claim are the same as those found in claim 4 and the claim is rejected for the same reason.

13. Regarding claim 16, Pearson, with the invention for a 3-tier financial transaction system, reads on the claim for a method for allowing a user to access data as follows:

Pearson teaches the feature of logging onto a systems interface to legacy systems (by initiating a session column 4 line 23);

Pearson teaches the feature of receiving voice inputs (with the VRU col. 1 lines 28-32);

Pearson teaches the feature of converting the voice inputs to a user request (column 1 lines 36-42);

Pearson teaches on the feature of sending the user request to the systems interface (column 1 lines 42-45); and

Pearson reads on the feature of receiving data from the systems interface in response to the user request (column 1, lines 48-49).

Pearson does not teach the legacy system comprises at least one of a loop facility assignment control system, a loop maintenance operations system, a mechanized loop testing system, a secure network element contract server, a mechanized time reporting system, and a work activity statistical sampling plan. However, providing a legacy system which comprises one of a loop facility assignment control system, a loop maintenance operations system, a mechanized loop testing system, a secure network element contract server, a mechanized time reporting system, and a work activity statistical sampling plan, was well known in the art, as indicated by applicant's admitted prior art (see specification, pages 1 to 2). It would have been obvious to one of ordinary skill at the time of the invention to modify the system of Pearson for implementation in which the legacy system comprises a loop facility assignment control system, a loop maintenance operations system, a mechanized loop testing system, a secure network element contract server, a mechanized time reporting system, a work activity statistical sampling plan or other systems that allows user access to the legacy database, so as to provide a system that supports real time execution of user transaction commands that require data from more than one legacy database and which provides users with real time access and execution of transaction

commands over an open network without modifying a legacy database management system to support an increased number of users, as suggested by Pearson (see col. 3, lines 59-67).

The VRU of Pearson presents considerations required for voice processing in promotion of his invention (column 2 lines 28 - column 3 line 32) without expressly teaching away from the feature so that his invention in turn could use speech recognition. Consequently, Pearson teaches the feature of software for receiving request to input by voice. Pearson does not teach the specifics of multiple operations, a graphical user interface that has a page for selecting one of the multiple operations or the specifics of the speech recognition application with voice module for each page corresponding to the multiple operations provided by the server.

Giangarra discloses a voice command interface in a data processing system and method are implemented to allow a user to speak a name of a link identified by Hypertext Markup Language (HTML) format to receive a desired web page from a communication network, such as the Internet. During operation of the data processing system and method for implementing the voice command interface, a client computer accesses a current web page using a server. When a new web page is accessed, a central processing unit in the data processing system provides control signals to a speech recognition unit to clear a vocabulary list currently stored within the speech recognition unit. Subsequently, the central processing unit commences to parse the HTML source code corresponding to the accessed web page. The central processing unit then determines whether the accessed web page has any links therein. If the web page does have links, the central processing unit detects those links during a parsing operation and enables the speech recognition unit to store the text displayed to an external user, which corresponds to the link in a special vocabulary list of the speech recognition unit. If new links are displayed, the recognition

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unit stores the text associated with the link in a vocabulary file, which reads on a stored separate vocabulary. A user is then able to provide a voice command to access the link by speaking the text stored within the special vocabulary list. Upon speaking that text, the central processing unit accesses a web page corresponding to the link identified by the text (Figures 6-12; col. 5, lines 25-46; col. 6, lines 32-61; col. 7, line 66 to col.8, line 8). It would have been obvious to a person of ordinary skill in the art of speech signal processing at the time of the invention to apply the method and/or teachings of Giangarra et al to the device/method of Pearson so as to realize the advantage of speech input using a microphone or a telephone.

15. Regarding claim 17, the claim is set forth with the same limits as claim 16. Pearson teaches the limitations of the feature for receiving a request for input by voice with the VRU (column 2 lines 28 - column 3 line 32). Without teaching away from the first feature, Pearson does not mention speech recognition. Giangarra discloses the central processing unit detects those links during a parsing operation and enables the speech recognition unit to store the text displayed to an external user, which corresponds to the link in a special vocabulary list of the speech recognition unit. A user is then able to provide a voice command to access the link by speaking the text stored within the special vocabulary list. Upon speaking that text, the central processing unit accesses a web page corresponding to the link identified by the text (Figures 6-12; col. 5, lines 25-46; col. 6, lines 32-61; col. 7, line 66 to col.8, line 8). It would have been obvious to a person of ordinary skill in the art of speech signal processing at the time of the invention to apply the method and/or teachings of Giangarra et al to the device/method of Pearson so as to realize the advantage of speech input using a microphone or a telephone.

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16. Regarding claim 18, the claim is set forth with the same limits as claim 16. Pearson teaches the limitations of converting the voice inputs to user inputs (column 1, lines 36-41) and converting the user inputs into the user request (column 1, lines 42-45).

17. Regarding claim 19, the claim is set forth with the same limits as claim 18. Recounting the existing capabilities available in other prior art to promote his invention, Pearson reads on the feature of selecting an operation or providing information for an operation (with the menu and inputs of column 1 lines 39-40). As the speech feature of this art is provided to illuminate the invention, this reference does not teach against the illustrated implementation of the features.

18. Regarding claim 20, the claim is set forth with the same limits as claim 18. Pearson reads on the feature of a protocol server (the Web Server 50 in figure 2) and a transaction server (the Application Server 56 in figure 2).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Angela A. Armstrong whose telephone number is 571-272-7598. The examiner can normally be reached on Monday-Thursday 11:30-8:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Hudspeth can be reached on 571-272-7843. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Angela A Armstrong
Primary Examiner
Art Unit 2626

AAA
July 29, 2006